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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LAXTON, GARY L

ART UNIT PAPER NUMBER

2838

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/075,624

Applicant(s)

MATSUO ET AL.

Examiner

Gary L. Laxton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 15 and 29 is/are rejected.
- 7) ☒ Claim(s) 1-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

2. Claims 1-42 are objected to because of the following informalities:

Claim 1 lines 4 and 5. "said source power" should read – said power source – for consistency.

Claim 1 line 5. the first predetermined voltage is actually of the DC to DC converter not of the power source (e.g. "for regulating said first predetermined voltage of said source power").

Claim 4 recites the limitations "said operation mode" and "said sleep mode" in line 3. There is insufficient antecedent basis for these limitation in the claim.

Claim 6 lines 2 and 3. "controls a current flowing said load"; it appears a word is missing.

Claim 15 line 6 . the first predetermined voltage is actually of the converting means not of the power source (e.g. "for regulating said first predetermined voltage of said source power").

Claim 18 recites the limitations "said operation mode" and "said sleep mode" in line 3. There is insufficient antecedent basis for these limitation in the claim.

Claim 29 line 5. the first predetermined voltage is actually of the converting means not of the power source (e.g. "regulating said first predetermined voltage of said source power").

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Claim 32 recites the limitations "said operation mode" and "said sleep mode" in line 3. There is insufficient antecedent basis for these limitation in the claim.

*Please find and correct any and all remaining claim errors. Also, all dependent claims inherit the same thru dependency.*

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 15 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Downs et al.

Downs et al disclose a power supply apparatus, figure 1, comprising a DC to DC converter (CV1) for converting a voltage of a power source supplied from a direct current power source (+270 Vdc) to a first predetermined voltage (+28 Vdc), the first predetermined voltage (+28 Vdc) being lower (+28 Vdc < +270 Vdc) than the voltage of the power source (+270 Vdc); and a voltage regulator (CV2) for regulating the first predetermined voltage (+28 Vdc) of the power source to at least a second predetermined voltage (+5 Vdc), the second predetermined voltage (+5 Vdc) being lower than the first predetermined voltage (+5 Vdc < +28 Vdc). [claim 1]

Downs et al also disclose a power supply apparatus comprising: converting means (CV1) for performing a DC to DC conversion for converting a voltage of a power source (+270 Vdc)

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supplied from a direct current power source to a first predetermined voltage (+28 Vdc), the first predetermined voltage being lower than the voltage of the power source (+28 Vdc < +270 Vdc); regulating means (CV2) for carrying out a voltage regulation for regulating the first predetermined voltage of the power source to at least a second predetermined voltage (+5 Vdc); the second predetermined voltage being lower than the first predetermined voltage (+5 Vdc < +28 Vdc). [claim 15]

Downs et al also disclose a method of power supply comprising the steps of: using a DC to DC converter (CV1) to convert a voltage of a power source supplied from a direct current power source (+270 Vdc) to a first predetermined voltage (+28 Vdc), the first predetermined voltage (+28 Vdc) being lower (+28 Vdc < +270 Vdc) than the voltage of the power source (+270 Vdc); and regulating (CV2) the first predetermined voltage (+28 Vdc) of the power source to at least a second predetermined voltage (+5 Vdc), the second predetermined voltage (+5 Vdc) being lower than the first predetermined voltage (+5 Vdc < +28 Vdc). [claim 29]

### ***Allowable Subject Matter***

5. Claims 2-14, 16-28, 30-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: prior art fails to disclose or suggest, in combination with the claimed subject matter, a power supply apparatus

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wherein the DC to DC converter is turned into a non-active state to stop the voltage conversion of the DC to DC converter and to pass the power source voltage when an operation mode is changed to a sleep mode [claims 2 and 16];

And, wherein the DC to DC converter outputs the power source voltage without performing the voltage conversion of the DC to DC converter when the operation mode is changed to sleep mode [claims 4, 18 and 32].

And, wherein the performing step turns the DC to DC converter into a non-active state to stop the DC to DC conversion and passes the power source voltage straight through the DC to DC converter to the voltage regulator when an operation mode is changed to a sleep mode [claim 30].

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

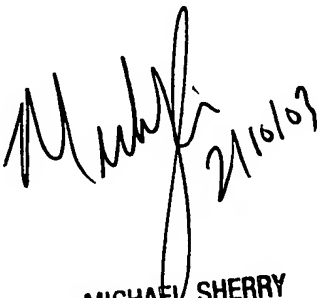
US 6,011,322 Stumfall et al discloses an apparatus for providing power to circuitry implementing two different power sources.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (703) 305-7039. The examiner can normally be reached on Monday thru Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703)308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
MICHAEL SHERRY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800